

Appl. No. 10502,117
Ampl. dated September 30, 2005
Reply to Office Action of June 30, 2005

Amendments to the Claims:

1. (Currently Amended) A high-frequency module including a wiring pattern formed in an organic insulative layer and a plurality of conductive parts forming passive elements and distributed parameter elements, which transmit a high-frequency signal,

each of the conductive parts being formed correspondingly to an area of the organic insulative layer where no woven glass fabric is laid[()], and

wherein the organic insulative layer is formed from among liquid crystal polymer, benzocyclobutene, polyimide, polynorbornene, polyphenylether, polytetrafluoroethylene, bismaleimide-triazine, which is low in specific inductive capacity and loss, or any one of these organic materials also having a ceramic powder dispersed therein.
2. (Original) The high-frequency module according to claim 1, wherein each of the conductive parts is covered with a ground layer formed on the organic insulative layer to form a strip structure or a micro-strip structure.
3. (Original) The high-frequency module according to claim 1, wherein the passive elements are an inductor and capacitor, resistor formed with the thin film technology.

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4. (Cancelled)

5. (Currently Amended) A high-frequency module comprising:

a base substrate block ~~having formed on a main side of~~ comprising an organic substrate having formed on a main side thereof a plurality of wiring layers each including an organic insulative layer and a wiring pattern and having at least the uppermost one of the wiring layers flattened to form a buildup surface; and an elements block having formed in the an organic insulative layer formed ~~on~~ over the a main side of the buildup surface of the base substrate block a wiring pattern and a plurality of conductive parts forming passive elements and distributed parameter elements, which transmit a high-frequency signal, each of the conductive parts of the elements block is formed correspondingly to an area of the organic insulative layer where no woven glass fabric is laid [(.)], and wherein the organic substrate and organic insulative layer are formed from among liquid crystal polymer, benzocyclobutene, polyimide, polynorbornene, polyphenylether, polytetrafluoroethylene, bismaleimide-triazine, which is low in specific inductive capacity and loss, or any one of these organic materials also having a ceramic powder dispersed therein.

6. (Original) The high-frequency module according to claim 5, wherein the base substrate block has a ground pattern in a portion of the organic insulative layer

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corresponding to the conductive parts and no woven glass fabric is laid at least between the ground pattern and conductive parts.

7. (Original) The high-frequency module according to claim 5, wherein being shielded by a ground pattern formed on the organic insulative layer to enclose the perimeters of the conductive parts, the ~~latter~~ conductive parts form together a strip structure or a micro-strip structure.

8. (Original) The high-frequency module according to claim 5, wherein the wiring layers in the base substrate block have no woven glass fabric formed in portions thereof opposite to areas where the conductive parts are formed.

9. (Original) The high-frequency module according to claim 5, wherein the passive elements are an inductor and capacitor, resistor formed with the thin film technology.

10. (Canceled)

11. (Currently Amended) A method of producing a high-frequency module, comprising the steps of forming a base substrate block and an elements block, respectively,

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in the base substrate block forming step, there is formed, on a main side of an organic substrate, a plurality of wiring layers each including an organic insulative layer and a predetermined wiring pattern, and a buildup surface is formed by flattening at the uppermost one of the wiring layers; and

in the elements block forming step, there is formed, in the organic insulative layer formed on the buildup surface of the base substrate block, a wiring pattern and a plurality of conductive parts forming passive elements and distributed parameter elements, which transmit a high-frequency signal, each of the conductive parts of the elements block being formed correspondingly to an area of the organic substrate where no woven glass fabric is laid[[.]], and

wherein the organic substrate and organic insulative layer are formed from among liquid crystal polymer, benzocyclobutene, polyimide, polynorbornene, polyphenylether, polytetrafluoroethylene, bismaleimide-triazine, which is low in specific inductive capacity and loss, or any one of these organic materials also having a ceramic powder dispersed therein.

12. (Original) The method according to claim 11, wherein the base substrate block forming step, a ground pattern is formed in a portion of the organic insulative layer corresponding to the conductive parts and no woven glass fabric is laid at least between the ground pattern and conductive parts.

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13. (Original) The method according to claim 11, wherein:

in the base substrate and element forming layer forming steps, a ground

pattern is formed on the organic insulative layer to enclose the perimeters of the
conductive parts; and

being shielded by the ground pattern, the conductive parts form together a
strip structure or a micro-strip structure.

14. (Original) The method according to claim 11, wherein the wiring layers in
the base substrate block have no woven glass fabric formed in portions thereof
opposite to areas where the conductive parts are formed.

15. (Cancelled)

Please add the following new claims:

16. (New) A high-frequency module comprising:

a base substrate block comprising an organic substrate containing a woven
glass fiber and having formed on a main surface thereof a plurality of wiring layers
each including an organic insulative layer and a wiring pattern and having at least
the uppermost one of the wiring layers flattened to form a buildup surface, and
wherein an electrical ground layer is formed between the woven glass fiber
substrate and the plurality of wiring layers in order to electrically isolate
subsequent wirings from the woven glass fiber; and

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an elements block having formed in an organic insulative layer formed on the main side of the buildup surface of the base substrate block a wiring pattern and a plurality of conductive parts forming passive elements and distributed parameter elements, which transmit a high-frequency signal,

each of the conductive parts of the elements block is formed correspondingly to an area of the organic insulative layer where no woven glass fabric is laid above the upper-most ground layer formed in the base substrate block.

17. (New) A high-frequency module comprising:

two organic substrates containing woven glass fiber attached together with a plurality of wiring layers therebetween, each wiring layer including an organic insulative layer and a wiring pattern, and wherein an electrical ground layer is formed between each of the woven glass fiber substrates and the plurality of wiring layers in order to electrically isolate the wiring layers from the woven glass fiber; and

wherein said plurality of wiring layers contains at least one element selected from a resonator, filter, or coupler, and

wherein the at least one element is formed corresponding to an area of the wiring layers where no woven glass fabric is laid beyond either of the ground layers.